



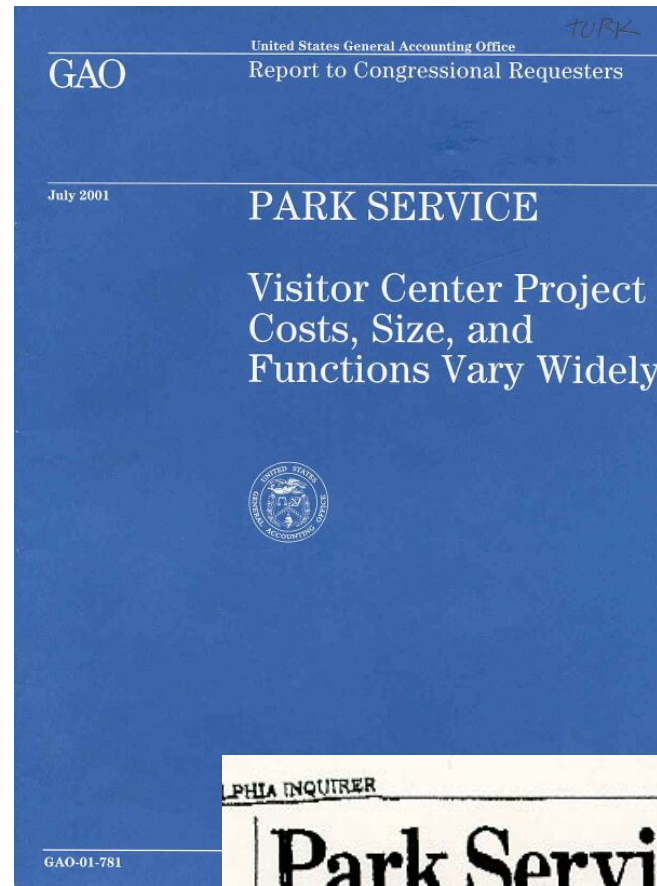
# Value Based Decision-making

The Role of Value Analysis  
in  
National Park Service Capital Improvement



# Congressional Perceptions.....

- “The Committee is upset that GMP’s are still **unrealistic**, despite it previous admonitions, when it comes to the size of facilities and development that is recommended”
- “Several recent proposals recommend visitor type facilities that were totally **unacceptable and unrealistic**”
- The Washita multi-use facility in planning is **too large**. Construction should cost **no more than \$4 million gross** including exhibits, office, public and maintenance space and everything else.





# The basic questions....

...and our OBJECTIVES

- **What** is value based decision-making?
- **What are the VA Basics?**
- **VA and the NPS Process?**
- What does **a good VA** look like?
- **Why** do a VA?



# What is Value-based Decision-making? What is VA?

“An **organized** effort directed by a person trained in value analysis techniques to analyze the **functions** of systems, equipment, facilities, services, and supplies for the purpose of achieving the **essential function** at the **lowest life cycle costs** consistent with the **required performance**, reliability, quality and safety.”

OMB Circular A-131



# **It is a structured process...**

guided by the Value Analysis Job Plan

- Information Phase
- Function Phase
- Creativity Phase
- Evaluation Phase
- Development Phase
- Recommendation Phase
- Implementation Phase



# VA is required!!!

## Director's Order 90 Value Analysis

- All NPS programs, projects, and activities will use value analysis as a management and decision-making tool in **(A) performing or contracting for the planning, design, construction, repair and rehabilitation/renovation of facilities**, and **(B) administrative and management programs** to improve operations, identify and remove nonessential capital and operating costs, and improve and maintain optimum quality of program and acquisition functions.



# When is it Required?

## VA Project Thresholds

- All construction related projects **over \$500,000** subject to Value Analysis
- Projects **over \$10 Million** two VA's required
  - *Schematic Design* and Design
- Projects **over \$1 Million** one VA required
- Projects **\$500,000 to \$1 Million** VA may be waived if study would exceed anticipated savings. **No Waiver above \$1 Million**

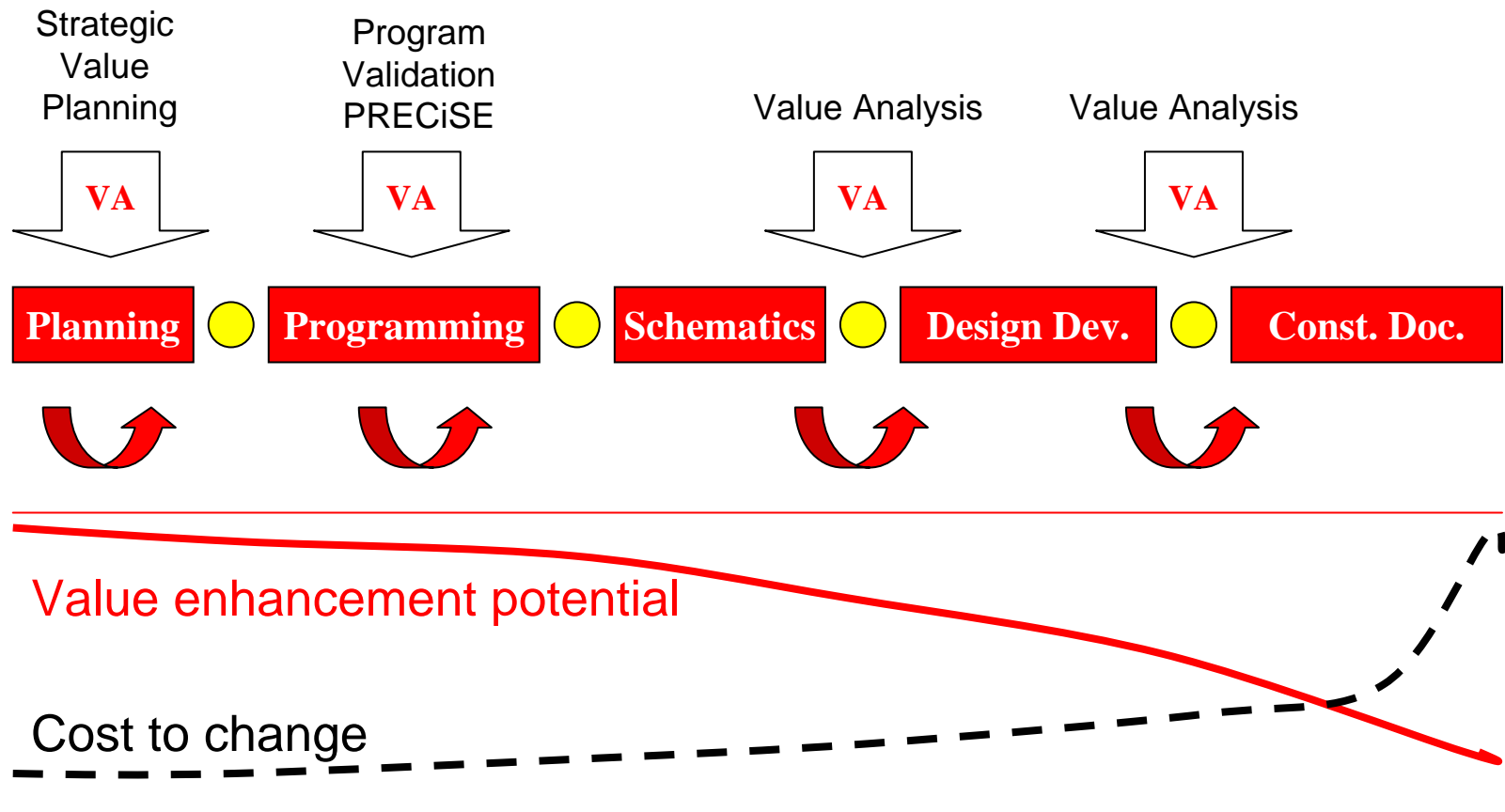


# What must be considered?

- **Why are we doing this project?**
  - Purpose and Circumstances of the decision.
  - Is this a visitor center? A research lab?
- **Who is affected by and interested in the decision?**
  - Customers and Stakeholders needs and preferences
- **How big a change are we making?**
  - The magnitudes of the advantages.
- **What are the Risks?**
- **How many things are affected?**
  - The magnitudes of the associated attributes
- **How important are these differences?**
- **What are the relative costs of the alternatives?**
- **What is the value of the incremental change?**
  - If a park elects to spend additional dollars what is the benefit!



# Value-based Decision-making is a continuous process....an Attitude!!!

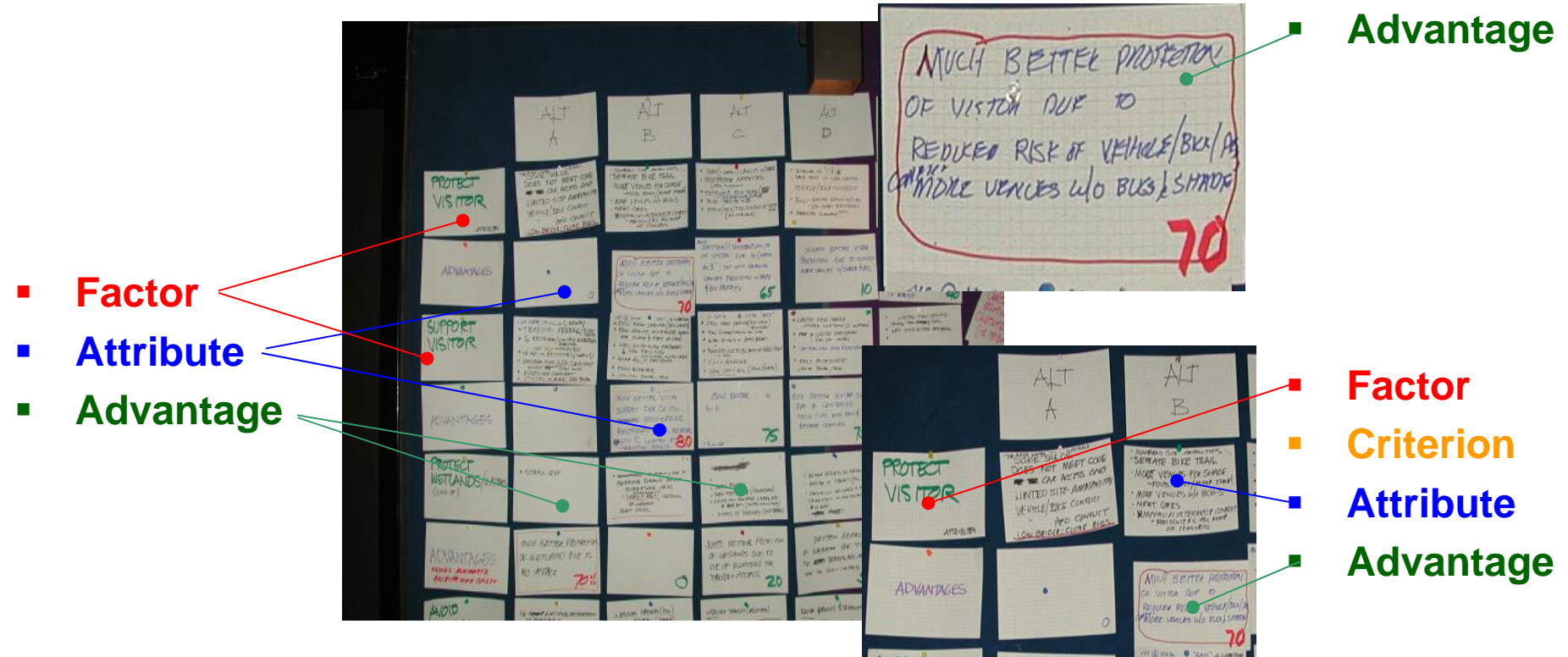




# The Role of the AE.....

- The **primary function** of the AE is to allow **informed choice**, to help the client make **sound value based decisions**
- **AE does not decide!!!**
  - Question for the AE Firm: How does your design process support sound decision-making by the client?

# CBA: Choosing By Advantage

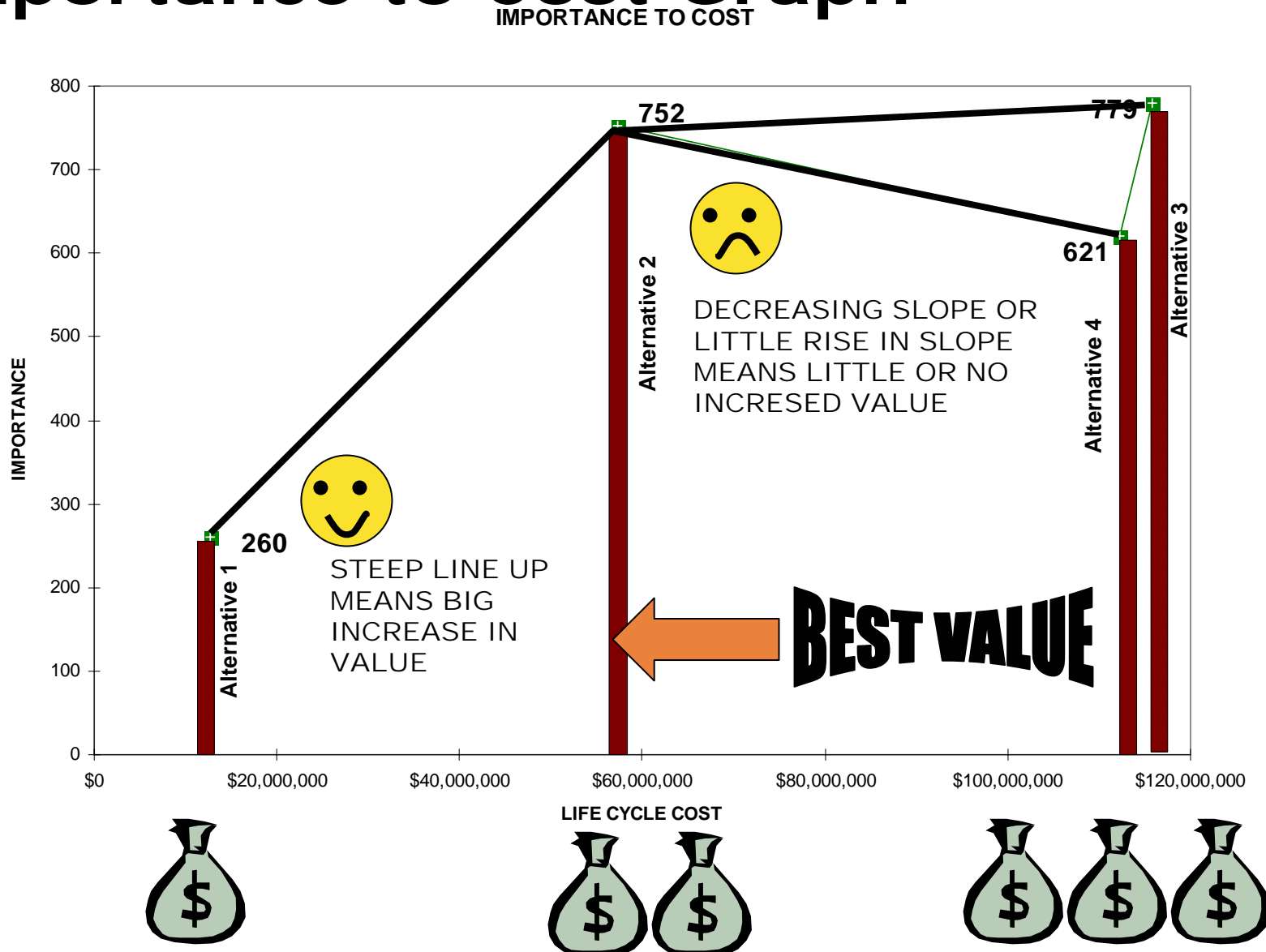




# Fundamental Rule of Sound Decisionmaking

**Decisions must be based  
on the  
Importance of  
Advantages**

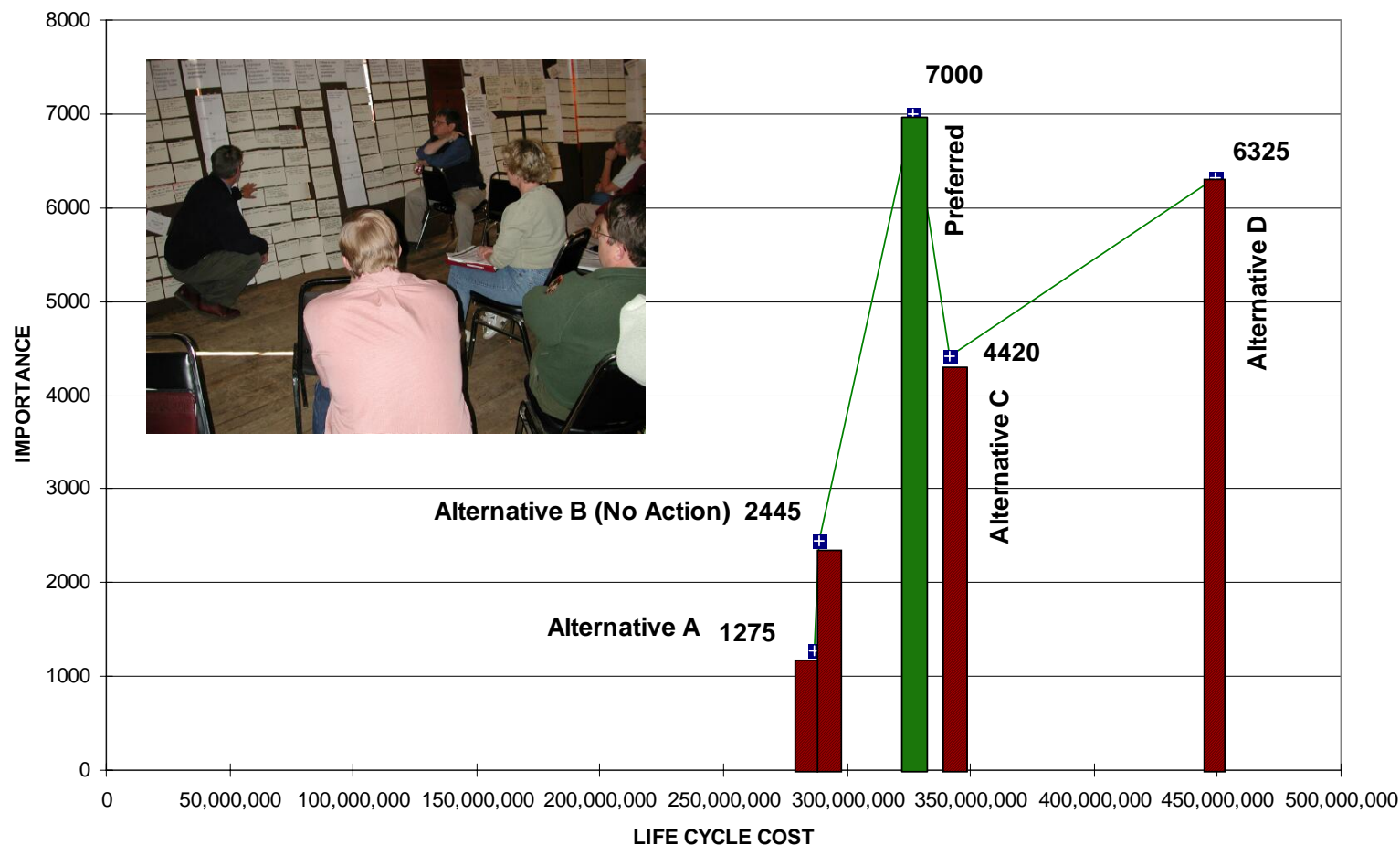
# Importance to Cost Graph



# Sequoia NP - GMP

(life cycle cost)

## SEQUOIA NP - GENERAL MANAGEMENT PLAN



# Value Analysis IS about.....

- Sound, Defensible, Value-based Decisionmaking
- Providing essential functions for an appropriate cost
- Benefit to Cost Relationships
  - Reducing cost
  - Improving benefits
  - Minimizing risk
- Managing the Decisions

